

APRIL 17, 1922

AVIATION

VOL. XII. NO. 16

Member of the Audit Bureau of Circulations

CONTENTS

Editorials	447	National Balloon Race	457
British Government Justifies Royal Air Force	448	Our Stored Helium Supply	457
Aero Club Closes New York Quarters	449	Flying Meet at Monmouth, Ill.	457
The British Rigid Airships	449	Drag of the Wragg Compound Aerofoil	457
Determination of Surface Area for Airships	450	Life Insurance and Aviation	457
Aviation in the Netherlands	451	Tests of the New Longren	457
For a U. S. Academy of Aeronautics	452	Aviation in Canada	458
Gliding Experiments in Switzerland	452	Sperry Field, Farmingdale, L. I.	458
"Who's Who in American Aeronautics"	453	French Perfect "Pilotless" Airplane	458
Notices to Aviators	455	Round the World Flight	458
Boston C. of C. for Wadsworth Bill	456	Army and Navy Air News	459
Portugal to Brazil Flight	456	Coming Aeronautical Events	461
Ammndsen's Polar Air Fleet	456	Foreign News	462
Curtiss Buffalo Plant	456		

THE GARDNER, MOFFAT COMPANY, Inc., Publishers
HIGHLAND, N. Y.

225 FOURTH AVENUE, NEW YORK

Subscription price: Four dollars per year. Single copies fifteen cents. Canada, five dollars. Foreign, six dollars a year. Copyright 1922, by the Gardner, Moffat Company, Inc.

Issued every Monday. Forms close ten days previously. Entered as second-class matter Nov. 22, 1920, at the Post Office at Highland, N. Y., under act of March 3, 1879.

THOMAS-MORSE AIRCRAFT CORPORATION



THOMAS-MORSE AIRCRAFT CORPORATION



Beyond Competition

THE GLENN L. MARTIN Bomber holds an enviable record. Its "Round-the-rim voyage" in which a single Martin Bomber circumnavigated the United States has not been equalled.

The records show that after having absorbed the higher first cost, the Martin bombers deliver cheaper mileage than

any other airplane of their class ever used by the Government.

Martin quality and reliability can be guaranteed only in the product of the Glenn L. Martin plant, which was planned, designed and created with the far-reaching intention of producing the most reliable airplane in the world, and which has constantly delivered the goods.

THE GLENN L. MARTIN COMPANY

CLEVELAND

Member of the Manufacturers Aircraft Association

L. D. GARDNER
PRESIDENT
W. D. MOTT
VICE PRESIDENT
W. J. SELLMAN
TREASURER
CARLOS NICHOLAS
REGIONAL MANAGER

AVIATION

LAMAR E. GARY
EDITOR
VIRGINIA E. CLARK
EDWARD F. WALKER
RALPH H. URBAN
CONTRIBUTING EDITOR

Vol. XVI

APRIL 17, 1932

No. 101

The United Air Force Visited

OPPONENTS of the idea of a single fighting air service, controlled by a separate air department, independent of, and coequal in status with the War and Navy Departments will do well to ponder over the speech recently made in the House of Commons by Asquith Chamberlain, speaking for the British government. The most important portions of the speech are reproduced elsewhere in this issue, but a few words alone quoting here a few of its high lights, for they make it clear why Great Britain does not intend to "wash out" her unified Air Force—as the Admiralty had hoped would occur.

If the Royal Air Force were to be subordinated by the army and navy, and Mr. Chamberlain, "navies and soldiers would continue to think of the force in terms of their own service and would not pursue its development as an independent force outside the purpose with which it was associated, and for which they desire that it should be employed."

This is an argument which has been put forth many times, but we do not believe that it has ever before been supported in such a clear and convincing language. And it was precisely because soldiers and sailors "thought in terms of their respective services", and not in terms of air warfare, that the British government resisted in the pressure of war the Air Ministry and the Royal Air Force. "Till that time the air was purely under naval or military command, and was only thought of in terms of naval or military warfare," said Mr. Chamberlain, and it was only after the Air Ministry was constituted with its air staff that "the aeronautical aspects of war were considered from an aerial point of view."

This was the situation which Great Britain found existing in 1914 and resolved despite considerable opposition from the Service Services. The opponents of the innovation then claimed that before long the unified air force would again be split up into the navy and army, and headed back to the War Office and to the Admiralty. Today, however, there can no longer be any doubt that the much criticized single air force idea was right. It is generally agreed that in the future battles will open up with a surprise attack from the air, and that this situation must be met by an air force which will render the matter from an aerial, and not a naval, or a military viewpoint. Hence the second conclusion the British government has arrived at with respect to national defense: That in the case of defense against air raids the army and the navy must play a secondary role. This means in other words that the Royal Air Force is today Great Britain's first line of defense, while the army is relegated to secondary place.

Students of national defense cannot afford to ignore the significance of the upheaval that has taken place in the traditions of a country which like Great Britain has for centuries chiefly relied on its naval service for keeping its shores inviolate of enemy attacks.

The National Balloon Race

ONE of the fascinating things about ballooning is that every year, in fact every night, is different from every other, even though starting from the same place. In this year's case there is the added variable of a new starting point.

Milwaukee furnishes most interesting possibilities both from a meteorological and geographical standpoint. It lies directly in the path of most of the cyclonic storms which sweep across the country, and the date selected (May 31) is just about on the dividing line between spring and summer conditions. Then almost any kind of weather is possible, with a probability of several different kinds as the cause of the race. The speed for example may be anything from 100 up to 150 m.p.h.

The large lakes of water nearby will give plenty of incentive for aerial piloting, and the proximity of the Canadian wilderness will make it important to carry good camping equipment. But such things do not discourage a real balloon "fan", for the long record of safety in ballooning has made it almost automatic that no matter how light a plane a balloonist is in there is always a way out for anyone who will "use his head."

Relatively made from its recognized scientific value, ballooning as a sport has the supreme virtue of furnishing a maximum of thrills with a minimum of danger. So here's to Milwaukee, the scene of this year's balloon race!

Radio in Aviation

MANY people recently have been talking about the use of radio in connection with aviation. The term "Block System of Signals" has been used rather freely in these discussions. In a sense, this term is a misnomer when applied to aviation, as the freedom from the restraints of being each division is one of the many advantages of aerial transport. The methods are required to be the block system to prevent crashes on the same track from running into each other, there is no necessity of warning various airplanes flying on an airway when there are other machines going in the same or opposite direction.

However, radio will be used by "dispositives" in much the same way as it is used at sea, that is, to keep track of, and give instructions to ships. A watch tower rigid control of air traffic will be necessary in the neighborhood of airports to avoid dangerous competition, as the space available for taking off and landing will become more and more limited as the traffic increases. In fact, an entirely new method will have to be developed for air traffic. The experience obtained in railroad management and vehicular traffic control will be but small aid, as the new mode of transport is a very different matter. But, taking everything together, it is very much simpler and hence tends to be safer.

Foreign News

France.—The Aveline automatic airplane stabilizer, of which an illustrated description appeared in the March 21, 1921, issue of AVIATION, has recently undergone a series of tests in France. A report on tests made by the Messageries Aériennes company above Le Bourget in a Farman "Goliath" indicates that the stabilizer is capable of great services in traversing large banks of fog, and in taking off from airframes covered in fog. In this latest test several pilots were on board the Goliath, which flew through the fog and emerged into clear air at 5000 ft. altitude, effecting the climb without difficulty and without intervention from the pilot. At this altitude several turns were made, both left-hand and right-hand. The engines were then throttled down and the machine descended to within 150 ft. from the ground, without the intervention of the pilot. During the descent the engines were several times opened up and throttled down, the machine automatically climbing when the engines were opened out and gliding when they were throttled down. Three times during the flight the pilots were told, the machine flying entirely without pilot during these changes.

The above invention employs a form of the pendulum principle, and part of the device is electric, part pneumatic and part aerodynamic. The pendulum portion, which is only partly to be regarded as a pendulum, consists of an inclinometer in which the fluid is mercury. This mercury is contained in a disc with a narrow circular groove, and serves to make and break an electric contact which operates the valves that admit compressed air to the air cylinder whose pistons actuate the control cables.

The first air express to be fully equipped for night flying left the London Air Station for Paris recently. This machine, the Farman Goliath "Verdun", with accommodations for thirteen passengers, is used regularly now by the Grands Express Aériens on their daily service between London and Paris. In addition to softly shaded lights in the saloon, red and green electric navigation lights are fixed on the extreme tips of the wings, and a bright rear light is fitted to the tail. Two powerful electric searchlights are placed in the center of the machine below the passenger cabin, and light up the ground over which the airplane is flying. The electricity for all this lighting is supplied by two dynamos, which are driven by tiny windmills rotating rapidly in the wind produced by the airplane as it rushes through the air. Four powerful magnesium flares are suspended in pairs below each lower wing tip, and the pilot lights these by electricity as he approaches the ground, thus making landing at night an easy operation.

Holland.—It is reported from Holland that exceptionally severe weather would have imposed great hardships upon the inhabitants of the many islands which lie to the north of the Dutch mainland, were it not for the timely assistance rendered by the big Fokker airplanes of the Royal Dutch Air Service Co. All boat traffic having ceased owing to the ice, the airplanes were used to deliver large quantities of food and other supplies to the islands.

The recent railroad strike in Germany has also provided an excellent opportunity for the Dutch company during the otherwise somewhat unprofitable winter season. The Fokker planes left Rotterdam for Hanover and Bremen, there to connect with the D.L.R. line to Berlin, three times daily loaded to capacity with mail, express and passengers.

Italy.—Airplanes flying over Milan, Italy, recently dropped thousands of leaflets printed in the national colors urging "Italians" to assure work for their own tradesmen "against foreign competition by buying exclusively Italian products," according to a report from the American Vice Consul.

"Italians, for the national welfare, for assuring work for our tradesmen and workmen—Maximum exportation and Minimum importation!" the leaflets read.

The action shows the concerted efforts of the country for the promotion and protection of home industries and trade by airplane propaganda.

Where to Fly

CALIFORNIA

SAN FRANCISCO, CALIFORNIA
EARL P. COOPER AIRPLANE & MOTOR CO.

ILLINOIS

CHECKERBOARD AIRPLANE SERVICE
FOREST PARK, ILLINOIS

INDIANA

One of the largest and best equipped flying fields in the United States.

CURTISS-INDIANA COMPANY

Kokomo, Indiana
ALL TYPES OF CURTISS PLANES.

MASSACHUSETTS

BOSTON AND SPRINGFIELD, MASS.
EASTERN AIRCRAFT CORP.
340 FIRST ST., BOSTON, MASS.

MINNESOTA

WHITE BEAR LAKE, MINN.
The Twin Cities' chief summer resort.
Harold G. Peterson Aircraft Company
SCHOOL OF AVIATION

NEW JERSEY

NEW YORK AIR TERMINAL
800 Acres — 6 miles from Times Square.
Learn on ships that cannot tail spin. Planes rented \$30. hr.
CHAMBERLIN AIRCRAFT
Hushhook Heights, N. J.

NEW YORK & NEW JERSEY

CURTISS FIELD, GARDEN CITY, LONG ISLAND
KENILWORTH FIELD, BUFFALO, N. Y.
FLYING STATION, ATLANTIC CITY, N. J.
CURTISS AEROPLANE & MOTOR CORPORATION

NEW YORK

AEROMARINE AIRWAYS, INC.
Times Building, New York
11 Passenger Flying Cruisers — 5 passenger, open and enclosed Flying Boats. Sightseeing Tours — Flights to Shore and Lake Resorts

OHIO

DAYTON, OHIO.

Supplies, Hangars, Shops and Field 1 Mile from Dayton limits.
JOHNSON AIRPLANE & SUPPLY CO.

OREGON

LAND OR WATER FLYING
OREGON, WASHINGTON AND IDAHO AIRPLANE COMPANY
PORTLAND, OREGON

PENNSYLVANIA

Flying School and Commercial Aviation
Send for Circular
Official Flying Field Aero Club of Pennsylvania
PHILADELPHIA AERO-SERVICE CORPORATION
636 Real Estate Trust Building, Philadelphia.

WISCONSIN

CURTISS-WISCONSIN AEROPLANE CO.
FLYING SCHOOL
Milwaukee Air Port
GILLES E. MEISENHEIMER
330 Clinton Street Milwaukee, Wis.

If you are one of the companies in your state having first class facilities for passenger carrying, pilots' training and special flights, you should be represented in WHERE TO FLY each week.

26 Consecutive Insertions \$20.00